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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,468	03/01/2004	Richard Konig	HMM-002-1	9964

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EXAMINER	
SAINT CYR, JEAN D	

ART UNIT	PAPER NUMBER
2623	

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10/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/790,468	KONIG ET AL.	
	Examiner	Art Unit	
	Jean D. Saintcyr	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on *01 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-27, filed 03/01/2004, are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1- 9 and 12-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Logan et al, US Patent No. 7055166.

Re claim 1, Logan et al teach receiving an input video signal (a receiver for receiving broadcast programming signal, col.2, lines 33-34; see fig.1, element 12); automatically identifying a segment in the input video signal locally using fingerprint data of both the segment and the input video signal (the segment identification signal acts as a type of fingerprint for identifying a portion of the broadcast, such as commercial or other such part of the broadcast, col.4, lines 63-65); and generating an output video signal comprising the input video signal with the segment replaced with a replacement portion(the splicing processor can operate responsive to a marking signal to generate a composite proprietary signal that removes an indicated program segment, such as a sequence of commercials, and replaces it with a video signal, such as a screen saver image, stored in database, col.20, lines 3-9).

Re claim 2, Logan et al disclose automatically receiving fingerprint data (data or fingerprint, col.12, line 49) of segments to be identified via a computer communications network (see fig.1, element 38, communication system; a computer network interface, or any other type of receiver capable of receiving a signal, col.8, lines 30-32); and storing the fingerprint data (the system can include a database memory that stores a segment identification signal, col.4, lines 61-65; that means the fingerprint data was stored).

Re claim 3, Logan et al disclose wherein the fingerprint data (fingerprint, col.12, line 49) is transmitted periodically (see fig.1, element 28, time stamp; a clock element

that generates at time spaced intervals a time stamp signal that represents a computer periodic time reference, col.9, lines 7-11; that means any transmission is done according to a clock reference).

Re claim 4, Logan et al teach analyzing video segments (analyzing the video signals, lines 39-46) and computing (see fig.3, processor) fingerprint data (fingerprint, col.12, line 49); storing the fingerprint data in a database (the system can include a database memory that stores a segment identification signal, col.4, lines 61-65; that means the fingerprint data was stored); and transmitting the fingerprint data to subscribers on a computer communications network (see fig.1, element 38, communication system; a computer network interface, or any other type of receiver capable of receiving a signal, col.8, lines 30-32).

Re claim 5, Logan et al disclose creating a fingerprint of a portion of an incoming video stream (fingerprint for identifying a portion of a broadcast, col.4, line 64); retrieving at least one stored fingerprint (the local database stores a series of identification signals, each of which provides information that acts like a fingerprint for uniquely identifying a known program sequence, col.20, lines 57-60), wherein the stored fingerprint represents a known video segment (known segment, col.17, line 43); comparing the fingerprint with the at least one stored fingerprint to determine the presence of a known video segment in the incoming video stream(compares characteristics of the segments to the segment identification signals to identify a known segment, col.17,lines 46-48); and replacing the known video segment in the incoming stream with a replacement video segment(removes an indicated program segment, such as a sequence of commercial, replaces it with a video signal, such as a screen saver image, stored within the local database, col.20, lines 5-8).

Re claim 6, Logan et al disclose monitoring the incoming video stream (monitoring the broadcast programming signal, col.2, line 28) during the replacing to determine an approximate end point of advertising content (an operator generates a marking signal representative of information for modifying the broadcast signal. This information may include time stamps that indicate the beginning and ending of commercials (col.21, lines 4-8); and terminating the replacing at the approximate end point of the advertising content (having values between the start and stop times of the marking signal, col.11, lines 7-8).

Re claim 7, Logan et al disclose further comprising taking the replacement video segment from a queue (the splicing processor replace the broadcasting programming signal information in the data memory 112 with data from local database, col.20, lines 20-22; see fig.5; that means the video segment for the replacement was selected from a list of video segment previously stored in the local database).

Re claim 8, Logan et al disclose wherein the queue is locally configured by a local

operator (the operator /editor can be the user of the system, col.10, lines 34-35; that means the user can configured the queue like a local operator)

Re claim 9, Logan et al disclose wherein said fingerprint (fingerprint, col.12, line 49) comprises statistical information (graphical data, col.12, line 49) regarding color (number of red, blue, and green pixels in a frame to produce a unique identifying value, col.12, lines 55-56; that means the fingerprint has information that concerns color).

Re claim 12, Logan et al disclose wherein said portion (portion of a broadcast programming signal, col.4, lines 57-58) is at least one frame (a specific frame of video, col.12, line 47).

Re claim 13, Logan et al disclose wherein said portion (portion of a broadcast programming signal, col.4, lines 57-58) is at least one partial spatial region (particular location, col.10, line 47) of a frame (a specific frame of video, col.12, line 47).

Re claim 14, Logan et al disclose wherein said incoming video stream is a digital video stream (compressed broadcast programming signal, col.15, line 25).

Re claim 15, Logan et al disclose wherein said incoming video stream is an analog video stream captured to digital form (see fig.1; the compressor converts the received programming signal into a compressed digital format suitable for storing in a digital memory system, col.8, lines 50-52).

Re claim 16, Logan et al disclose wherein said known video segment (known portion, col.4, line 57) is an advertisement (insertion of different advertisements, col.12, line 8).

Re claim 17, wherein said known video segment (known portion, col.4, line 57) is a commercial break outro (sequence of commercial, col.11, line 12).

Re claim 18, Logan et al teach wherein said replacing is performed using a video switch (see fig.3, element 64, selection controller).

Re claim 19, Logan et al teach wherein said replacing is performed using digital splicing (see fig.5, element 104, splicing processor; that means a digital splicing).

Re claim 20, Logan et al display wherein said replacement video segment comprises a video advertisement (insertion of different advertisements, col.12, line 8).

Re claim 21, Logan et al disclose wherein said replacement video segment comprises a still picture (screen saver image, col.20, line 7).

Re claim 22, Logan et al disclose wherein said replacement video segment comprises a web page (see fig.4, element 92, WEB SITE).

Re claim 23, Logan et al disclose wherein the transmitting further comprises transmitting the fingerprint data (fingerprint data, col.12, line 49) along with a time stamp (see fig.1, element 48, time stamp) and channel information (programming signal of a channel, col.6, lines 37-38).

Re claim 24, Logan et al disclose an analyzer analyzing video segments analyzing the video signals, lines 39-4) and computing (see fig.3, processor) fingerprint (data fingerprint, col.12, line 49; a fingerprint database storing the fingerprint data); and a transmitting unit transmitting the fingerprint data to requestors on a computer communications network (see fig.1, element 38, communication system; a computer network interface, or any other type of receiver capable of receiving a signal, col.8, lines 30-32).

Re claim 25, Logan et al teach further comprising a correlation unit generating a time stamp (see fig.1, element 48, time stamp) which is transmitted by the transmitting unit along with the fingerprint data (fingerprint data, col.12, line 49).

Re claim 26, Logan et al disclose an identifying unit identifying a segment in an input video signal (having a storage for segment identification signal, col.4, lines 56-57) using fingerprint data (fingerprint data, col.12, line 49); a replacing unit replacing the segment in the input video signal with a replacement portion to generate an output video signal (see fig.5, element 104, splicing processor); and an output unit generating the output video signal (see fig. 1, element 32, video monitor).

Re claim 27, Logan et al disclose a fingerprint receiving unit (data fingerprint, col.12, line 49; a fingerprint database storing the fingerprint data) receiving fingerprint data for a plurality of respective segments via a computer communications network (see fig.1, element 38, communication system; a computer network interface, or any other type of receiver capable of receiving a signal, col.8, lines 30-32); and a storage device storing received fingerprint data (see fig. 5, element 108, local database; the local database stores a series of identification signals, each of which provides information that acts like a fingerprint, col.20, lines 57-59).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan et al in view of Dimitrova et al, US Patent No. 6100941.

Re claim 10, Logan et al disclose wherein said fingerprint (fingerprint data, col.12, line 49).

But Logan et al fail to teach comprises statistical information regarding spatial variations.

In an analogous art, Dimitrova et al teach comprises statistical information regarding spatial variations (see fig. 16, logo detection; detection of an absence of logo, col. 17, line 10; logo is a part of spatial variations).

In view of the teaching of Dimitrova, it would have been obvious for any person of ordinary skill in the art at that time the invention was made to implement statistical information regarding spatial variations into the system of Logan. Such modification will give opportunity to users to know exactly if there is the presence or the absence of logo in a segment.

Re claim 11, Logan et al disclose wherein said fingerprint (fingerprint data, col.12, line 49).

But Logan et al fail to disclose comprises statistical information regarding temporal variations.

In an analogous art, Dimitrova et al disclose comprises statistical information regarding temporal variations (all of the following techniques can be used to detect a commercial. They will start with the average cut, cut frame distance, average cut frame distance trend, cute rate, These will be produced a multiplicity of temporal segment where a commercial may be locatedcol.15, lines 39-44; this is equivalent to the temporal characteristics defined by the applicant).

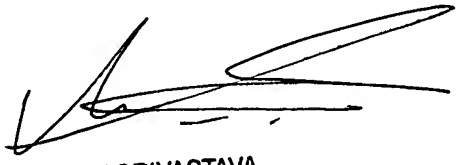
In view of the teaching of Dimitrova, it would have been obvious for any person of ordinary skill in the art at that time the invention was made to implement statistical

information regarding temporal variations in to the system of Logan. Such modification will give opportunity to users to identify any anomaly in the cut rate of any segment.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US. No. (Broadcast Advertisement Adapting Method And Apparatus, Ficco et al), this system gives opportunity to users to replace a broadcast ad segment with another segment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Duclos Saintcyr whose phone number is 571-270-3224. The examiner can normally reach on M-F 7:30-5:00 PM EST.If attempts to reach the examiner by telephone are not successful, his supervisor, Vivek Srivastava, can be reach on 571-272-7304. The fax number for the organization where the application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see htpp://pair-direct.uspto.gov. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, dial 800-786-9199(IN USA OR CANADA) or 571-272-1000.



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